5.d

An exact Descriptiō of the total and visible Eclipse of the MOON

August 29.th 1718 in the Evening.

I. Senex sculp.

There being shortly to happen an Eclipse of ỹ Moon visible in these Kingdoms, and very remarkable, not only for it's being Total, but also for its long continuance so; It has been thought proper to present ỹ World with some Schemes thereof fitted to ỹ Meridian of London, drawn after a new method, and deduced from ỹ latest and most correct Theorys of ỹ Moon.

It is well known, that one of the best means hitherto found for ascertaining the Longitude of Places, is the exact Observation of Eclipses, especially the Lunar, which are free from the perplexities of Parallaxes: For this reason it is hoped that ỹ present Attempt to render the Observation of this Eclipse the more easy, and exact, will not be unacceptable to the Curious, who (to the honour of the present Age) are not only more numerous, but more addicted to entertainments of this nature.

In these Schemes the Lattitude of the Moon is made agreeable to the Learned Dr. Halley's Saros, and that they may be ỹ more useful, as well as entertaining, the Moon is represented by way of Map, as described by Hevelius, and as seen thrô a Telescope: And the approach of the Shade to the several Spots thereof, as well as the quantity of the Eclipse, is shewn by the respective Arches crossing its Face at every half quarter of an Hour. Fig. I. represents the course of the Shade in its increase, proceeding from Arch to Arch till it ends in total Darkness at B. And Fig II. represents the course of the Shade in its decrease, from the first recovery of Light at C, till the end of the Eclipse at D.

But it is to be observed, that thô the quantity of the Eclipse will from time to time be exactly shewn by these Arches drawn on the Moon's surface, yet She being subject to a Libration from East to West, (& è contra) and this Map suiting most properly her Appearance near ỹ Solstices, when she has little or no such Libration, it is not pretended that the representations in these Schemes shall perfectly correspond to the Phænomena of the situation of the Spots, with respect to the Verge of the Shade: Thô it being presumd, that the Difference will be but small, these Schemes will not only facilitate the Observations to be made of this Eclipse, and render 'em plesant also, but may likewise be serviceable towards determining the quantity even of this Libration.

How useful Schemes of Lunar Eclipses are, (laid down after this manner) needs not be told to Astronomers. The several Arches representing (as it were) so many distinct Eclipses. If Clouds, (or as in this case) the Moon's too near Neighbourhood to the Horizon, happen to prevent the view of the beginning or end &c. of an Eclipse, yet a clear Observation of the Immersion, or Emersion, of some one, or other of her Spots, will equally serve the purposes of Geography and Navigation.

The Phases towards the Beginning of the Eclipse are omitted, because the Moon rises Eclipsed.

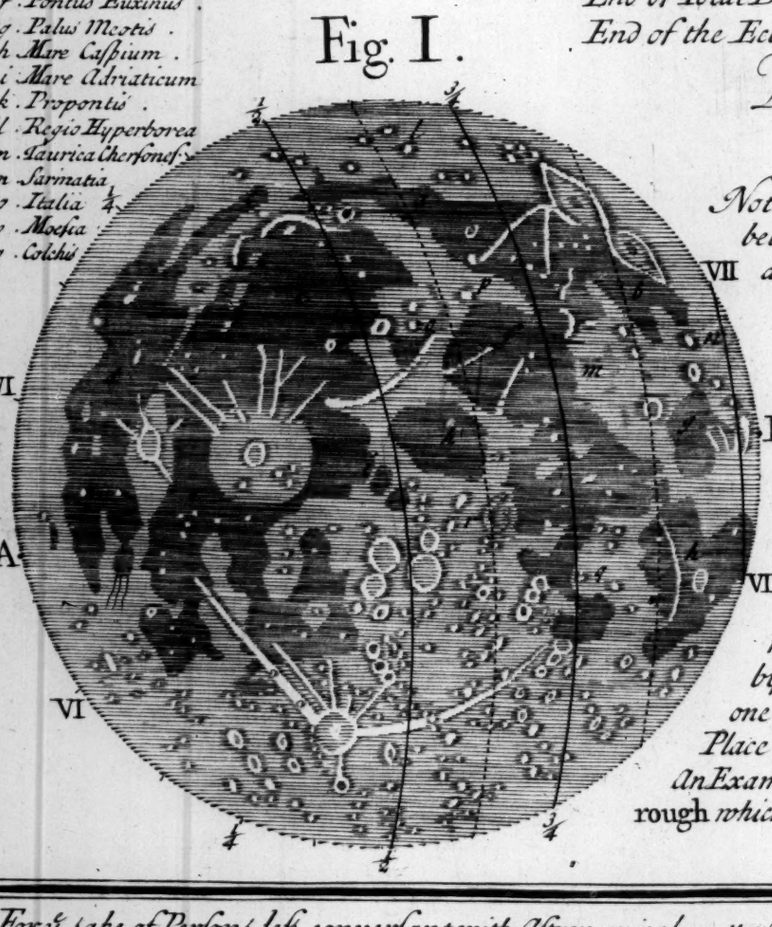
The principal Phænomena are as follow Aug. 29. Afternoon

	at London	at Rodborrough
Beginning of Total Darkness	h 7 . 2 . 10	6 . 53 . 10
Middle of the Eclipse	7 . 54 . 0	7 . 45 . 0
End of Total Darkness	8 . 45 . 50	8 . 36 . 50
End of the Eclipse	9 . 51 . 34	9 . 42 . 34

Duration of Total Dark: h 1 : 43 : 40

a. Mare Hyperboreum.
b. Paludes Hyperboriæ.
c. Sinus Hyperborius.
d. Mare Eoum.
e. Mare Mediterraneum.
f. Pontus Euxinus.
g. Palus Mœotis.
h. Mare Caspium.
i. Mare Adriaticum
k. Propontis.
l. Regio Hyperborea
m. Taurica Chersonesus
n. Sarmatia
o. Italia
p. Mœsia
q. Colchis
r. Asia Minor.
s. Sicilia.
t. Peleponnesus.
u. Scythia
w. Persia
x. Arabia
y. Palestina
z. Egyptus
&. Libya
α. Inf. Cereinna
1. Mons Sinai
2. M. Taurus
3. M. Sepher
4. M. Ætna
5. M. Apeninus
6. M. Olympus.

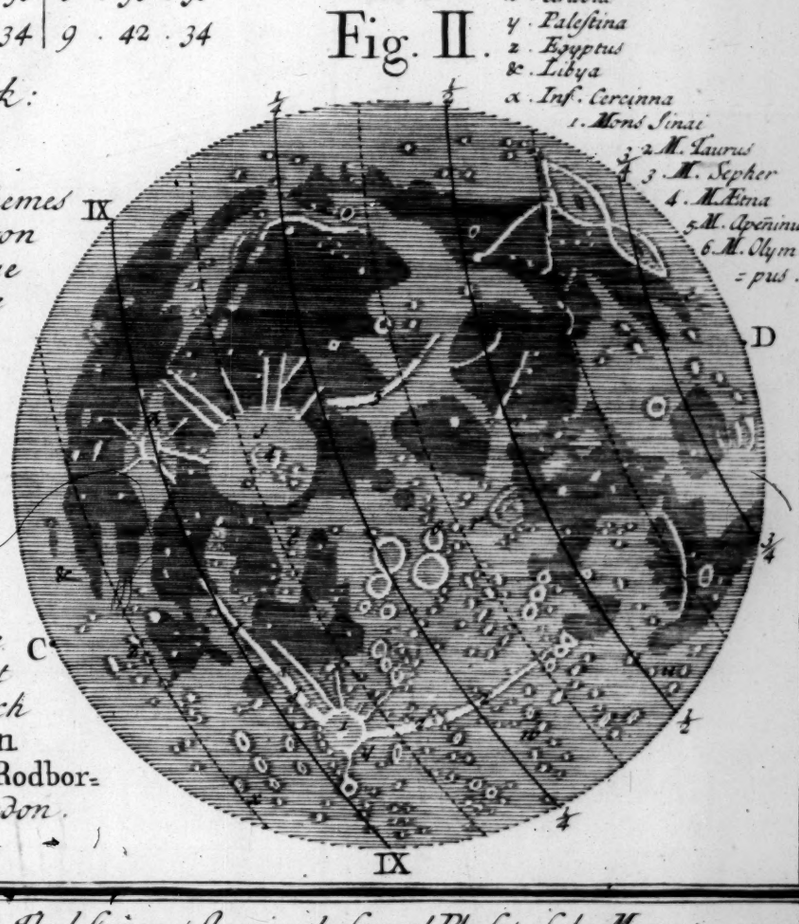
Fig. I.



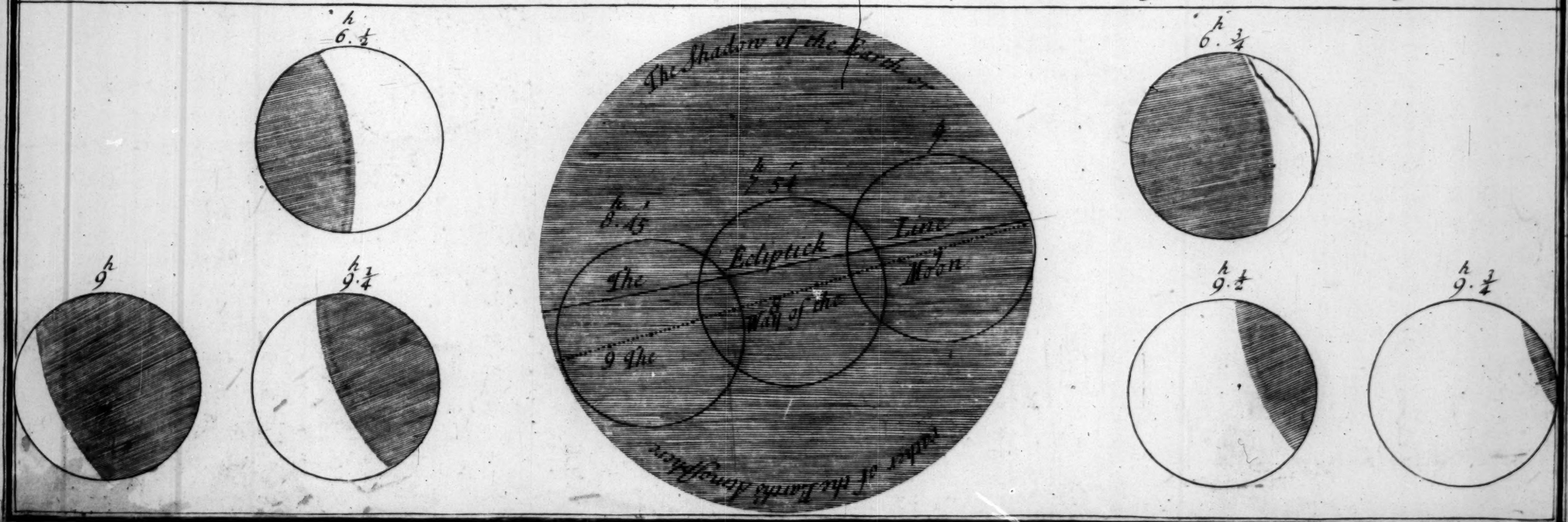
Note that the position of the Schemes being suited to the view of the Moon as she appears to the naked Eye the Paper must be turn'd upside down to answer the Appearanes thrô an inverting Telescope.

Note also that the Time of the several Phænomena of this Eclipse may (from the Calculation here given) be made to suit any particular Place by Adding or Substracting about one minute for every 9 Miles ỹ such Place lyes East or West from London An Example hereof you have above in Rodborough which lyes about 80 Miles West of London.

Fig. II.



For ỹ sake of Persons less conversant with Astronomical matters, ỹ following Schemes are added. The lesser ones shewing the several Phases of the Moon to every quarter of an hour before, and after total Darkness: The larger one in the middle, shewing the position of the Moon and her Phases at ỹ Middle of ỹ Eclipse, and as She Approaches to her Immersion into, and Emersion from total Darkness. The figures over the Schemes denote ỹ respective Time of each Phases.



Sold by I. Senex at the Globe in Salisbury Court near Fleetstreet. And W. Taylor at the Ship in Paternoster Row. Where may be had Dr. Halley's Scheme of the next total and visible Eclipse of ỹ Sun May 1724